IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of	:	
McCormick et al.	:	Patent Art Unit: TBA
Division of Serial No. 09/522,900	:	Examiner: TBA
Filed: 8 February 2002	:	
For: Self Antigen Vaccines for Treating B Cell Lymphomas and Other Cancers	:	

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

Prior to prosecution on the merits, kindly amend the application as follows:

IN THE SPECIFICATION

Kindly amend the specification as follows:

Page 10, line 9, before "though" insert --SEQ ID NO:59--.

Page 29, line 22, following "cg" insert – SEQ ID NO:60--.

Page 37, line 11, following " '5" insert – SEQ ID NO:61--; and

line 23, following " '5" insert – SEQ ID NO:62--.

IN THE CLAIMS:

Kindly cancel claims 1-50, without prejudice.

Kindly amend claims 51 and 52 as follows.

51. A method of producing a single chain antibody comprising a first and second domain comprising the steps of:

(a) joining a nucleic acid encoding the first domain of the polypeptide to a nucleic acid encoding a first part of a linker to produce a first nucleic acid construct;

(b) joining the nucleic acid encoding a second part of the linker to a nucleic acid encoding the second domain of the polypeptide to produce a second nucleic acid construct;

(c) incorporating said first and said second constructs into a transient plant expression vector in frame so that, when expressed, the polypeptide bears the first and second domain separated by the linker;

(d) transfecting a plant with the vector so that the plant transiently produces the polypeptide; and

(e) recovering the polypeptide as a soluble, correctly-folded protein.

52. The method of claim 51, wherein the first domain of said single chain antibody is the Ig V_H domain and the second domain is the Ig V_L domain, both of which domains create an idiotype of a surface Ig of a B cell lymphoma, and wherein said product induces an idiotype-specific response directed to said lymphoma upon administration to a subject.

Kindly add the following new claims.

--54. The method of claim 51 wherein said domains are linked by an amino acid linker that:

(a) has between one and about 50 residues;

(b) consists of between one and 12 different amino acids, and

(c) facilitates secretion and correct folding of said polypeptide to mimic the tumor epitope in its native form in or on said tumor cell.

55. The method of claim 54 wherein the linker is a member of a randomized library of linkers that vary in size and sequence, and said library is encoded by nucleic acid sequences

consisting of a repeated pattern of degenerate repeated triplet nucleotides having the following requirements:

(i) position 1 of each repeated triplet cannot be the same nucleotide as position 2 of the repeated triplet;

(ii) position 2 of each repeated triplet cannot be the same nucleotide as position 3 of the repeated triplet; or

(iii) position 1 of each repeated triplet cannot be the same nucleotide as position 3 of the repeated triplet.

56. The method of claim 55, wherein the nucleotide in the first and second positions of each repeated triplet is selected from any two of deoxyadenosine, deoxyguanosine, deoxycytidine or deoxythymidine.

57. The method of claim 56, wherein

(i) position 1 of each repeated triplet is deoxyadenosine or deoxyguanosine;

(ii) position 2 of each repeated triplet is deoxycytidine or deoxyguanosine; and

(iii) position 3 of each repeated triplet is deoxythymidine.--

REMARKS

The Examiner hereby is authorized to obtain the CRF of the Sequence Listing from the parent application for use herein. The content of the CRF is the same as the paper copy attached hereto, which also is the same as the paper copy filed in the parent application.

Favorable consideration and early indication of allowance are solicited earnestly.

Respectfully submitted,

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Amended Claims

51. A method of producing [the polypeptide of any one of claims 13-16] a single chain antibody comprising a first and second domain comprising the steps of:

(a) joining a nucleic acid encoding the first domain of the polypeptide to a nucleic acid encoding a first part of a linker to produce a first nucleic acid construct;

(b) joining the nucleic acid encoding a second part of the linker to a nucleic acid encoding the second domain of the polypeptide to produce a second nucleic acid construct;

(c) [incorporated] incorporating said first and said second constructs into a transient plant expression vector in frame so that, when expressed, the polypeptide bears the first and second domain separated by the linker;

(d) transfecting a plant with the vector so that the plant transiently produces the polypeptide; and

(e) recovering the polypeptide as a soluble, correctly-folded protein.

52. The method of claim 51, [wherein the polypeptide is a single chain] wherein the first domain of said single chain antibody is the Ig V_H domain and the second domain is the Ig V_L domain, both of which domains create an idiotype of a surface Ig of a B cell lymphoma, and wherein said product induces an idiotype-specific response directed to said lymphoma upon administration to a subject.